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DHA VISITS NHRC



Two NMRC Corpsmen Selected for Medical Degree Preparatory Program (COVER)

From Naval Medical Research Center Public Affairs



SILVER SPRING, Md. – Two Corpsmen from the Naval Medical Research Center (NMRC) were selected as candidates for the U.S. Navy Medical Degree Preparatory Program (EMDP2) beginning in August, 2017. Hospital Corpsman First Class Ezechiel Fenelon and Hospital Corpsman Second Class Tania Rodeiro were two of five selected throughout the Navy.

“Leaving NMRC is the hardest part of this experience. Being one of the few lab technicians for the Navy’s only rapid deployable mobile laboratories gives me a great sense of pride and responsibility and it will be hard to let it go, but at the same time

NMRC has broadened my horizons and I am very grateful to have been able to experience what Ph.D. scientists do in research labs. This gives me the opportunity to expand my naval career,” said Rodeiro.

Fenelon and Rodeiro have been two major contributors to the operational readiness of NMRC and have spent time both in and out of the labs contributing to a variety of NMRC research endeavors. Stationed at the NMRC Biological Defense Research Directorate (BDRD), Frederick, Maryland, for the past two years, they have spent time analyzing specimens for biological warfare threat agents in alignment with operational goals and training objectives.

“Their attention to detail and their passion in making sure their work was accurate really made a big impact on the BDRD mission. They are always prepared to go the extra mile to be effective team members. Both (are) outstanding team members I knew I could always depend on,” said Chief Vilma Bauer, Senior Enlisted Leader, NMRC BDRD.

She continued, “With their perseverance and dedication, along with strong planning, flexibility and ability to work independently, and their desire to always strive for excellence, I am confident they are the right choices for this program.” For the next two years, the two will spend most of their time preparing for the Medical College Admission Test (MCAT), taking prerequisites, and completing graduate science level courses before starting medical school.

As is common with new opportunities, when one door closes, another must open.

“The application process for a Navy academic program like this is quite rigorous and meticulous,” said Fenelon. “Both Rodeiro and I only had about two months to put our packages together, which felt like no time at all.”

EMDP2 is a two-year undergraduate education program that consists of intensive coursework, preparation, and mentoring to prepare students to apply to medical school. Upon completion of the program, successful students will be competitive for acceptance to any U.S. medical school....(cont.)

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Defense Health Agency to Assume Oversight of DoD HIV/AIDS Prevention Program (FEATURE)

From Naval Health Research Center Public Affairs



SAN DIEGO – Vice Adm. Raquel Bono, director, Defense Health Agency (DHA), visited the Naval Health Research Center (NHRC) June 8, to discuss the transition of oversight for the Department of Defense (DoD) HIV/AIDS Prevention Program’s (DHAPP) from Navy Medicine to the DHA.

DHAPP was established in 2001 to help contain the global health threat posed by the HIV pandemic. DHAPP’s mission was (and still is) to assist foreign militaries, develop HIV control programs in support of global health security, and DoD security cooperation efforts.

Since DHAPP’s founding, the Navy, through Navy Medicine and NHRC, has served as executive agent (EA)

for the organization. NHRC was selected to manage DHAPP, which is a directorate of the research center, due to the command’s expertise in HIV research and development of effective prevention and intervention programs for the U.S. military.

In 2014, one year after the DHA was stood up, the DoD approved the realignment of all medical EA organizations under DHA’s leadership. DHA oversight will streamline interagency collaboration for DHAPP and enhance the DHA’s global health engagement capabilities and mission.

Bono’s visit provided the opportunity for her to learn more about DHAPP operations, the level of administrative support NHRC provides for the directorate, and meet with staff before the transition is complete in late August. This was Bono’s second visit to NHRC and DHAPP. While serving as the U.S. Pacific Command (PACOM) surgeon, Bono toured the command during a West Coast visit.

“When I was the PACOM surgeon, a large part of my portfolio included going into different countries to support global health engagement and look at theater security cooperation,” said Bono. “DHAPP, along with the President’s Emergency Plan for AIDS Relief and other government agencies, was among our constant partners. I was always very impressed when these organizations came together in interagency collaboration, sharing collective goals and making progress towards achieving them.”

Bono went on to say that having DHAPP align under DHA’s leadership will enable broader opportunities for the organization to expand its interagency partnerships and work more closely with the DoD’s combatant commands (COCOMS). DHA is a joint, integrated combat support agency that enables the Army, Navy, and Air Force medical services to provide the COCOMS with a medically ready force and a ready medical force. “As a combat support agency, with direct linkages to the COCOMS, DHA can amplify the work DHAPP is doing towards global health engagement,” said Bono....(cont.)

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PERUVIAN NAVY SURGEON GENERAL AND OTHER DISTINGUISHED GUESTS VISIT NMRC

From Naval Medical Research Center Public Affairs



SILVER SPRING, Md. – The Peruvian Navy Surgeon General, RADM Julio C. Cacho-Moran, and Peruvian Navy personnel from the Direccion de Salud Naval, as well as Capt. Guillermo Pimentel, commanding officer, U.S. Naval Medical Research Unit No. 6 – Peru (NAMRU-6), visited the Naval Medical Research Center (NMRC) for a tour of research facilities and a meet-and-greet with Capt. Adam Armstrong, commanding officer, NMRC, June 16.

“For over 30 years the Peruvian Navy has hosted the NAMRU-6 laboratory in their Centro Medico Naval Cirugano Mayor Santiago Tavera. Our collaboration has been instrumental in carrying out the mission of the NMRC R&D enterprise in South America,” said Pimentel... (cont.)

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MILITARY SEALIFT DEPUTY COMMANDER VISITS NAVY LAB IN DAYTON

By Megan Mudersbach, Naval Medical Research Unit-Dayton Public Affairs



DAYTON – Rear Admiral John Schommer, Deputy Commander, Military Sealift Command visited Naval Medical Research Unit - Dayton (NAMRU-D) as part of a Navy Executive Engagement in Dayton, Ohio, June 12-14.

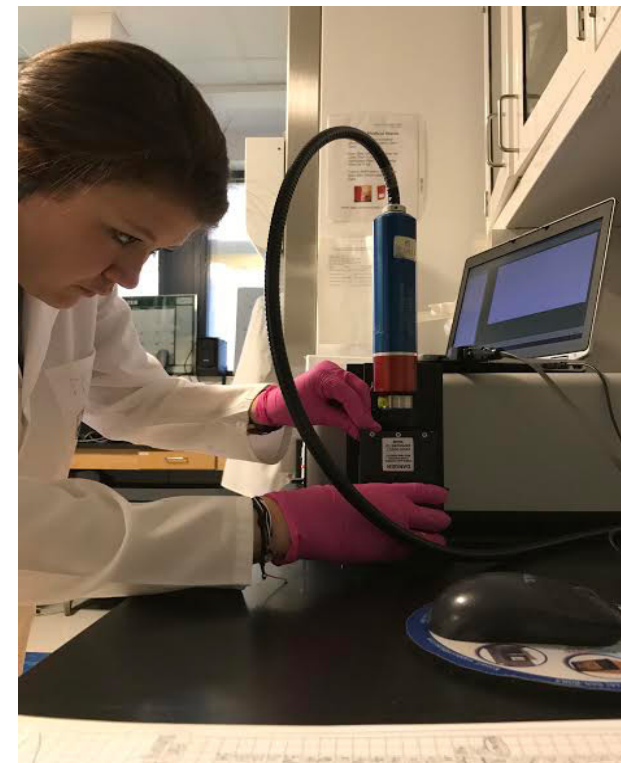
“I’m from Dayton,” Schommer said, “it’s an honor to be back in my hometown as a Flag Officer for a Navy Executive Engagement.”

Commander William Howard, NAMRU-D executive officer, NAMRU-D, joined Schommer during a social event with members of the Miami Valley Military Affairs Association, June 12. Attending were members from the Dayton Development Coalition, county commissioners, veteran affairs, and the Dayton rotary club...(cont.)

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NMRC SUMMER INTERNS ARRIVE, ALL READY TO RESEARCH

From Naval Medical Research Center Public Affairs



SILVER SPRING, Md. – Researchers from the Naval Medical Research Center (NMRC) welcomed sixteen summer interns from all over the country to assist with various research projects May – July, 2017.

The internships are part of the Department of Defense Science, Technology, Engineering and Mathematics (STEM) initiative. NMRC offers two programs for students through the office of Naval Research: The Naval Research Enterprise Internship Program (NREIP) for undergraduate and graduate students; and the Science and Engineering Apprenticeship Program (SEAP) for high school students.

The interns will be working at NMRC on their assigned research projects with their mentors, as well as focus on individual research, for 8-10 weeks. Both programs provide an opportunity for students to participate in research at NMRC, as well as other Department of the Navy (DoN) laboratories during the summer, advancing their knowledge and interest in their desired fields of study.

“NMRC student interns are currently working on a wide range of projects, including topics such as researching novel technologies that will help heal wound infections, developing methods to help reduce or prevent bone formation in muscle that occurs when troops experience traumatic blasts, and identifying new pathogens from infected ticks and mosquitoes,” said Lt. Cmdr. Roxanne Burrus, Deputy Department Head, Viral and Rickettsial Disease Department, and the summer intern coordinator at NMRC.

Each intern is assigned to a mentor from various NMRC research departments including the Wound Infections Department, the Regenerative Medicine Department, the Neurotrauma Department, the Undersea Medicine Department, the Viral and Rickettsial Diseases Department, as well as Genomics and Bioinformatics.

“Mentoring is critical for equipping and training the next generation of scientists. I was fortunate to have an outstanding mentor in graduate school, and it motivates me to help the summer research interns along their path in the sciences,” said Lt. Chaselynn Watters, microbiology researcher, Wound Infections Department, NMRC.

Along with Watters, other mentors from NMRC are Lt. Cmdr. Peter Walker, Lt. Joshua Swift, Anna Tschieffely, Biswas Biswajit, Katherine Cilwa, Usamah Kawoos, Rania Abutarboush, Erin Sanders, Aaron Hall, Chen Ching, Molly McLendon, Allen Richards, Ju Jiang, and Michael Rouse.

Students eligible for NREIP must be U.S. citizens with 31 or more college credits and enrolled at a four-year U.S. college or university accredited by the U.S. Department of Education....(cont.)

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NAMRU-SA WORKING TO IMPROVE TREATMENT OF DRUG-RESISTANT WOUND INFECTIONS

By David DeKunder, 502nd Air Base Wing Public Affairs

SAN ANTONIO – An innovative project being conducted at the Naval Medical Research Unit San Antonio (NAMRU-SA) could lead to the development of laser therapy technology to improve the treatment of antibiotic resistant wound infections in injured warfighters.

Dr. Nancy Millenbaugh, research chemist and principal investigator, Craniofacial Health and Restorative Medicine Directorate, NAMRU-SA, is using laser therapy to enhance the treatment of maxillofacial (mouth and jaw) wound infections.

She is studying the effectiveness of nanoparticle-targeted laser therapy to weaken bacteria in wounds that contain biofilms – a protective coating –making infections highly resistant to antibiotics....(cont.)



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KEEPING COOL WITH SCIENCE

By Mr. Jay Heaney, Environmental Physiologist, Naval Health Research Center



On land or at sea, from scorching deserts to sweltering engineering spaces, military operations often require service members to work in environments that make heat safety a constant concern. When factoring in individual activity and fitness levels, gear, equipment, and clothing, body heat isn't the only thing building up—the potential for heat injuries rises, too.

Over the last 28 years, I've been conducting thermal research at the Naval Health Research Center (NHRC) to develop strategies that reduce or prevent heat injuries and keep our troops healthy and mission-ready.

When a unit loses personnel due to heat injuries, reduced manning can make it difficult to meet operational requirements and negatively impact mission success. In 2013 alone, there were 324 cases of heat stroke and just over 1,700 other heat injuries among active duty service members. That is over 2,000 warfighters who were unable to report for duty, either temporarily or permanently, and support their unit's mission....(cont.)

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R&D CHRONICLES: REMEMBERING NAMRU-5, THE NAVY'S MEDICAL LABORATORY IN ETHIOPIA

By André B. Sobocinski, Historian, BUMED



For “unflagging professionalism, resourcefulness and determination in carrying out their assigned duties...”

~NAMRU-5's Meritorious Unit Commendation, 1977

Forty years ago—in the midst of a bloody civil war that would see the ousting of the Ethiopian monarchy—the U.S. Navy Medical Research Unit No. 5 was disbanded. This would not only mark the end of Navy Medicine's history in Ethiopia, but also the very name of NAMRU-5 (1965-1977).

For much of the twentieth century—first as regent (1916-1930) and later as emperor (1930-1974)—

Haile Selassie would be the symbol and very embodiment of the Ethiopian nation. An international figure, Selassie forged many deep diplomatic and military ties with other nations during his 58-year reign. In 1953, Selassie would negotiate a historic military assistance agreement with the United States to pave the way for increased American presence in his country.

Over the next decades, the U.S. Navy would operate a communications station and clinic in Asmara (then part of the Ethiopian Federation); and December 31, 1965, the Navy opened a detachment of U.S. Naval Medical Research Unit No. 3 (Cairo, Egypt) at the Imperial Central Laboratory and Research Institute in the Ethiopian capital of Addis Ababa.

The NAMRU-3 Detachment-Addis Ababa formally commenced operations in September 1966 under the directorship of civilian scientist Dr. Jack Schmidt and a staff of 26 Americans, one British physician, and 37 local nationals. Its mission was to “conduct research and development on infectious diseases of military importance in sub-Sahara Africa.”

The laboratory shepherded studies on malaria parasites, river blindness, elephantiasis, louse-borne diseases, insecticide resistance, and trypanosomiasis or East African Sleeping Sickness. A vector-borne disease commonly transmitted by the tsetse fly, sleeping sickness can manifest in fever, severe headaches, extreme fatigue, swollen lymph nodes, aching joints and an infection of the central nervous system which, if left untreated, would result in death. It was first reported by the laboratory in 1967 and soon after would appear in epidemic form throughout Ethiopia. Laboratory scientists would not only track its source, but also contain it.

Over the next two years NAMRU-5 would be comprised of a staff of five naval officers, two U.S. civilian scientists, an Air Force officer, a senior medical resident, a guest scientist, nine Navy enlisted technicians and 57 Ethiopian nationals... (cont.)

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NAMRU-DAYTON HOSTS AEROSPACE MEDICINE RESEARCH ALIGNMENT AND COLLABORATION

By Megan Mudersbach, Naval Medical Research Unit-Dayton Public Affairs

DAYTON – Naval Medical Research Unit- Dayton (NAMRU-D) sponsored the fourth annual Aerospace Medicine Research Alignment and Collaboration (AMRAC) working group, July 11-13.

The working group is geared toward past and current aerospace medicine research, programmatic research objectives, future research, and potential collaborations across military and industry organizations.

“AMRAC is a unique opportunity for aeromedical directors and other key members to come together to coordinate research, ensuring our government labs provide the best service to both military and civilian aviation,” said Captain Rees Lee, commanding officer, NAMRU-D.



During the three-days, more than 45 attendees joined to discuss relevant and timely issues pertaining to aeromedical research initiatives. Discussions focused on minimizing overlap of research efforts to foster research collaboration.

“This group is not only tri-service, this group of folks comes together from across the government to tackle problems that still threaten our aviators every day,” said Brigadier General Mark Koeniger, Commander, 711th Human Performance Wing (HPW), Wright- Patterson Air Force Base, during opening remarks, “There’s a lot of experience in this room.”

Cmdr. Michael Lowe, Deputy Director, Naval Aerospace Medical Research Laboratory, NAMRU-D, spear headed the AMRAC planning and execution team. Lowe structured the agenda to include briefings from each organization, a tour of the Aerospace Medical Research Laboratory facilities, and breakout sessions to highlight ways forward to improve future research.

USAFSAM will host the next AMRAC meeting, January 18, 2018, in conjunction with their 100th anniversary celebration.

Attendees came from NAMRU-D, 711 HPW, United States Air Force School of Aerospace Medicine, United States Army Aeromedical Research Laboratory, Federal Aviation Association Civil Aerospace Medical Institute, National Aeronautical Space Agency (NASA) Ames, NASA Langley, NASA Johnson Space Center, Naval Submarine Medical Research Laboratory, and Navy Experimental Diving Unit.

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MILITARY HEALTH SYSTEM RESEARCH SYMPOSIUM 2017

Stories Coming in the September R&D Newsletter

August 27-31, 2017

Gaylord Palms Resort & Convention Center, Kissimmee, FL

#NavyResearch #MHSRS2017



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- [Navy Scientist from NAMRU-D Presents Findings on Motion Sickness Treatment](#)
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- [Tissue Regeneration Research Presented by Navy Scientist at MHSRS](#)

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